2014 Air Quality Progress Report for London Borough of Lewisham

In fulfillment of Part IV of the
Environment Act 1995
Local Air Quality Management

November, 2014

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Executive Summary

The Council has a statutory duty under the provisions of the Environment Act 1995 to review and assess air quality within the Borough. This combined Air Quality Action Plan (AQAP) Progress Report summarises the results of air quality monitoring across the London Borough of Lewisham and progress with the AQAP during the 2013 calendar year.

The automatic monitoring results of Nitrogen Dioxide in the Borough for 2013 show a small decrease in the annual mean concentration, although all monitoring stations continue to exceed the national air quality objective for this pollutant. The diffusion tube results do not reflect such a clear trend.

Monitoring of Particulate Matter shows that the annual concentration has remained fairly static over the last 5 years and is below the air quality objective.

In summary, concentrations within the AQMAs still exceed the objectives for nitrogen dioxide and the AQMAs should remain. A Detailed Assessment was carried out in 2011 and a new AQMA for the Crofton Park Area was designated in August 2013.

Concentrations at all other locations outside of the AQMAs are all below the objectives at relevant locations. Therefore there is no need to proceed to a Detailed Assessment.

Lewisham continues to make progress with the measures listed on it’s action plan. and will prepare for the submission of the next progress report.

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1 Introduction

1.1 Description of Local Authority Areas

The London Borough of Lewisham is situated in southeast London. It is bordered to the west by Southwark, to the east by Greenwich and to the south by Bromley. It has a small frontage on to the River Thames in the north. It is an inner London borough comprising a densely populated area with an estimated population in 2010 of approximately 261,600. The Borough is mostly residential with areas of employment around the main commercial centres of Lewisham, New Cross, Catford, Deptford and Sydenham. However, compared to other London boroughs, Lewisham is relatively green with approximately one fifth of the borough being open space. The Borough has a broad socio-economic range combining a mix of wealthier wards and wards with more concentrated areas of deprivation. Some of the most deprived wards are New Cross, Evelyn, Deptford and Downham. In these areas health and the quality of housing are poorer.

The main sources of air pollutants are the busy and congested roads. Only 31% of the borough workforce are employed in the borough (Lewisham Employment Land Study, 2008) with the majority travelling outside the borough to work. 69 per cent of local people commute out of Lewisham to work. The main roads that run through the Borough include the A2, A20, A21 and the South Circular (A205). There are currently 68 minor industrial processes that are regulated by the Council and one Part A installation (SELCHP) regulated by the Environment Agency.

1.2 Purpose of Progress Report

This report fulfils the requirements of the Local Air Quality Management (LAQM) process as set out in Part IV of the Environment Act (1995), the Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007 and the relevant Policy and Technical Guidance documents. The LAQM process places an obligation on all local authorities to regularly review and assess air quality in their areas, and to determine whether or not the air quality objectives are likely to be achieved. Where

exceedences are considered likely, the local authority must then declare an Air Quality Management Area (AQMA) and prepare an Air Quality Action Plan (AQAP) setting out the measures it intends to put in place in pursuit of the objectives.

Progress Reports are required in the intervening years between the three-yearly Updating and Screening Assessment reports. Their purpose is to maintain continuity in the LAQM process.

They are not intended to be as detailed as Updating and Screening Assessment Reports, or to require as much effort. However, if the Progress Report identifies the risk of exceedence of an Air Quality Objective, the Local Authority (LA) should undertake a Detailed Assessment immediately, and not wait until the next round of Review and Assessment.

1.3 Air Quality Objectives

The air quality objectives applicable to LAQM **in England** are set out in the Air Quality (England) Regulations 2000 (SI 928), The Air Quality (England) (Amendment) Regulations 2002 (SI 3043), and are shown in Table 1.1. This table shows the objectives in units of micrograms per cubic metre µg/m^3 (milligrammes per cubic metre, mg/m^3 for carbon monoxide) with the number of exceedences in each year that are permitted (where applicable).

Table 1.1 Air Quality Objectives included in Regulations for the purpose of LAQM in England

Pollutant	Air Quality Objective		Date to be achieved by
	Concentration	Measured as	
Benzene	16.25 µg/m^3	Running annual mean	31.12.2003
	5.00 µg/m^3	Annual mean	31.12.2011
1,3-Butadiene	2.25 µg/m^3	Running annual mean	31.12.2003
Carbon monoxide	10 mg/m^3	Running 8-hour mean	31.12.2003
Lead	0.50 µg/m^3	Annual mean	31.12.2004
	0.25 µg/m^3	Annual mean	31.12.2008
Nitrogen dioxide	200 µg/m^3 not to be exceeded more than 18 times a year	1-hour mean	31.12.2005
	40 µg/m^3	Annual mean	31.12.2005
Particulate Matter (PM_{10}) (gravimetric)	50 µg/m^3, not to be exceeded more than 35 times a year	24-hour mean	31.12.2004
	40 µg/m^3	Annual mean	31.12.2004
Sulphur dioxide	350 µg/m^3, not to be exceeded more than 24 times a year	1-hour mean	31.12.2004
	125 µg/m^3, not to be exceeded more than 3 times a year	24-hour mean	31.12.2004
	266 µg/m^3, not to be exceeded more than 35 times a year	15-minute mean	31.12.2005

1.4 Summary of Previous Review and Assessments

London Borough of Lewisham (the Council) undertook previous rounds of review and assessment of air quality in line with the system of Local Air Quality Management reporting requirements. From the first round, exceedances of the National Air Quality Objectives for nitrogen dioxide (NO_2) and particulates (PM_{10}) were identified. The exceedances were greatest close to busy roads demonstrating the contribution that comes from motor vehicles. Consequently, five Air Quality Management Areas (AQMAs) were declared in 2001. The AQMAs consist of four areas in the north of the borough together with a series of ribbon roads in the south.

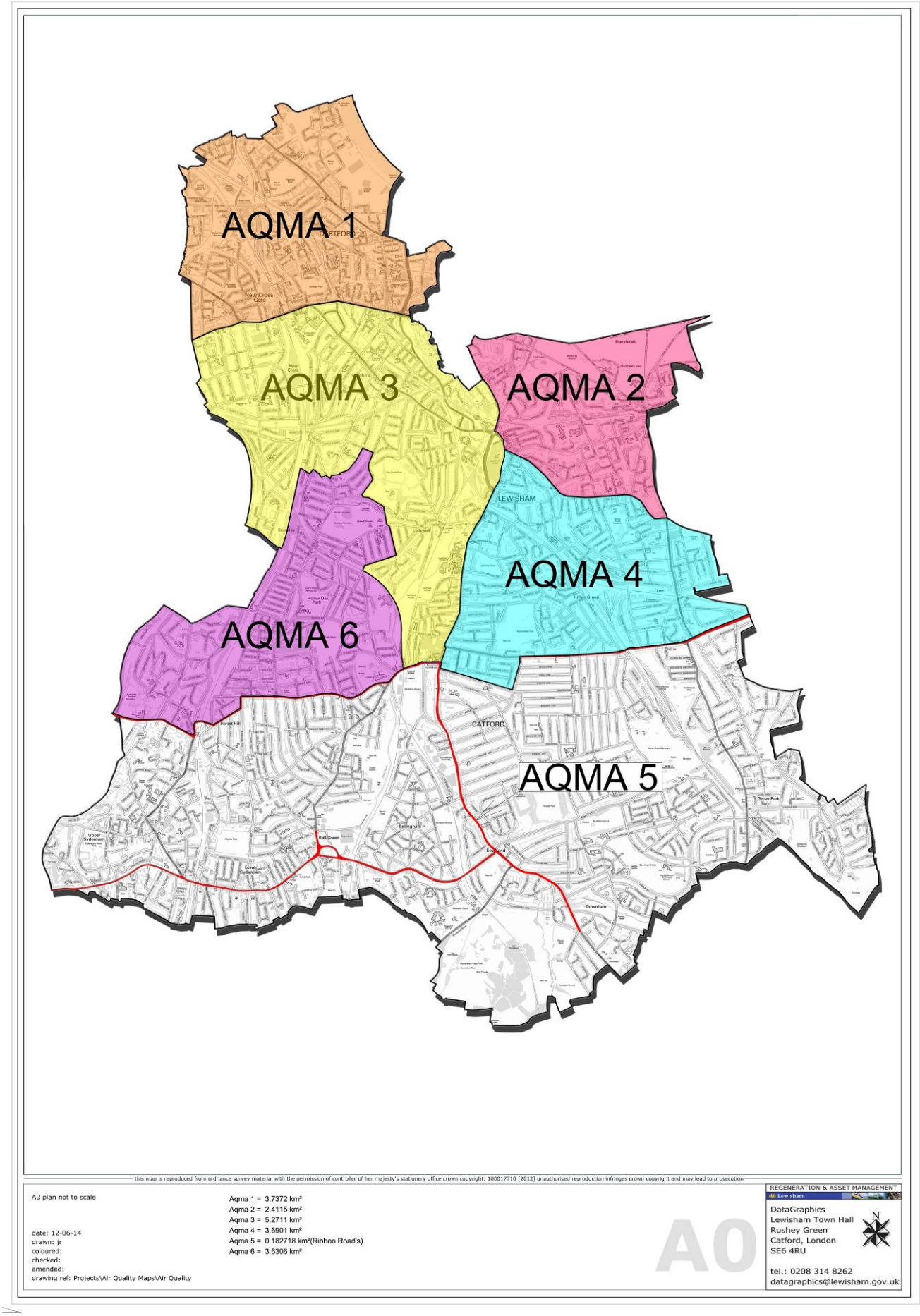
Subsequent Review and Assessments have been carried out. These reports concluded that the designation of the AQMAs should remain, although exceedances of the PM_{10} objectives have not been observed for several years. Exceedances of the objectives for NO_2 continue, however, and the potential for additional areas that fail to meet the objectives outside of the existing AQMAs was identified in 2009. Consequently, a Detailed Assessment was carried out in 2011 which used air quality modelling to determine the extent of the area of any exceedances. Of the roads considered, the modelling exercise confirmed that exceedances of both objectives for NO_2 are likely close to the B218 and B238 roads.

The 2013 progress report supported the findings of the previous review and assessment document and detailed assessment. Further to the detailed assessment of 2011, a consultation with residents took place between September and October 2012, after this the council decided to include the surrounding residential streets in addition to the B218 and B238 as a precautionary measure, with 70% of local people in support. A report recommending an AQMA for the Crofton Park area then went before a council meeting in April 2013.

An Air Quality Management Area was declared for the area of Crofton Park and the borders of Forest Hill and Perry Vale, which came into affect 30 August 2013. The AQMA will cover the area of modelled exceedances and beyond in order to align with boundaries of other AQMAs and major roads and will make a total of six air quality management areas in the Borough.

Five AQMAs already exist in the borough for both nitrogen dioxide and particulate matter PM10, which were declared in 2001. However, the new AQMA is for nitrogen dioxide only, as PM10 levels are below legal limits in the area.

Figure 1.1 Map of AQMA Boundaries



2 New Monitoring Data

2.1 Summary of Monitoring Undertaken

2.1.1 Automatic Monitoring Sites

The Council undertakes automatic monitoring at four fixed sites as detailed below:

- Lewisham 1 – an urban background site located in Catford which started operating in 1996. This site monitors nitrogen dioxide, sulphur dioxide and ozone.
- Lewisham 2 – located approximately 6m from the roadside of the A2 New Cross Road. The site monitors nitrogen dioxide, sulphur dioxide, PM_{10} and $PM_{2.5}$ using FDMS.
- Lewisham 3 – classed as an industrial site, the monitor is located on the northern edge of a residential area and approximately 10m south of a strip of waste transfer sites. The site measures PM_{10} using a BAM.
- Lewisham 4 – a roadside site, the monitor is located approximately 7m from the A20 Loampit Vale. This is close to new high rise developments and where further development is scheduled.. It measures nitrogen dioxide and PM_{10} using a TEOM.

Details of the sites are presented in Table 2.1 and their locations are shown in Figure 2.1. All four sites are part of the London Air Quality Network (LAQN) and therefore the standards of QA/QC are similar to those of the government's AURN sites. Regular calibrations are carried out, with subsequent data ratification undertaken by ERG at King's College London. The QA/QC process for the New Cross station includes the conversion of PM_{10} data from TEOM (Tapered Element Oscillating Microbalance) analyser to gravimetric reference equivalent using the VCM (Volatile Correction Method). No conversion is required for the PM_{10} data from the Mercury Way monitoring site as the pollutant is measured using a BAM (Beta Attenuation Mass Monitor).

Figure 2.1 Map of Automatic Monitoring Sites

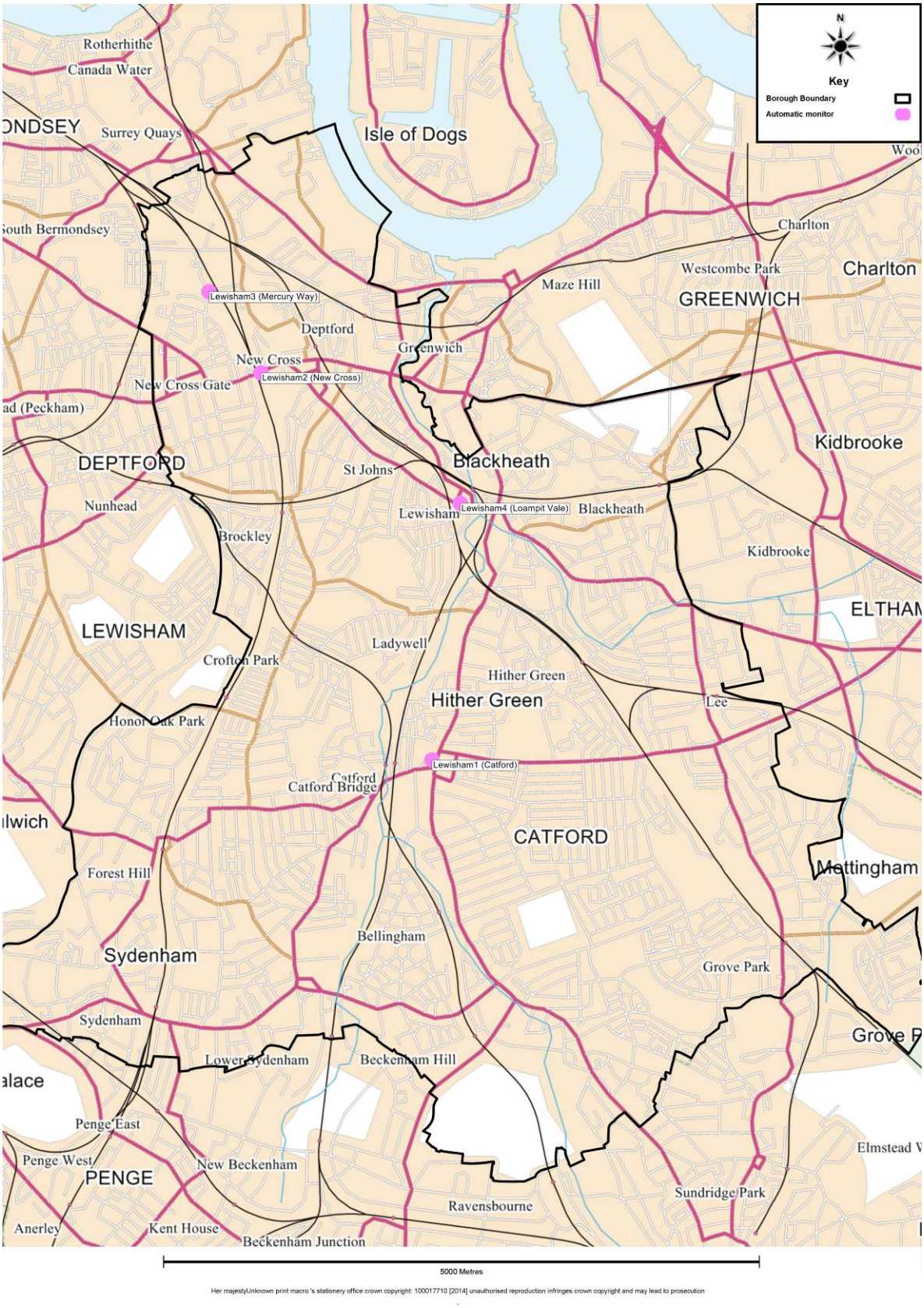


Table 2.1 Details of Automatic Monitoring Sites for London Borough of Lewisham

Site ID	Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Inlet Height (m)	Pollutants Monitored	In AQMA?	Monitoring Technique	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst-Case Exposure?
LW1	Lewisham1 (Catford)	Urban background	537675	173689	3.0m	NO2 SO2 O3	Y-AQMA3	Chemiluminescent UV fluorescence UV photometer	Y*	3m	N
LW2	Lewisham2 (New Cross)	Roadside	536241	176932	2.5m	NO2 SO2 PM10 PM2.5	Y-AQMA3	Chemiluminescent UV fluorescence FDMS FDMS	Y	6m	Y
LW3	Lewisham3 (Mercury Way)	Industrial	535806	177612	2m	PM10	Y-AQMA4	BAM	Y	2m	Y
LW4	Lewisham4 (Loampit Vale)	Roadside	537912	175838	2.5m	NO2 PM10	Y-AQMA3	Chemiluminescent TEOM	Y	7m	Y

The monitor is located in a shopping precinct in which market stall holders are regularly present. Therefore, there is relevant exposure to all except the annual mean objectives.

2.1.2 Non-Automatic Monitoring Sites

In 2013, the Council carried out monitoring of NO_2 using diffusion tubes at 32 different locations. One diffusion tube is used as a travel blank. Details of the locations of all diffusion tubes are provided in Table 2.3 below.

One of the locations is a triplicate site where the tubes are collocated with the automatic monitoring station on New Cross Road. The diffusion tubes are located within 0.5m of the inlet sampler of the chemiluminescent analyser at the continuous site. The study compared equivalent exposure periods, although some of the continuous results are provisional. The results from the study indicate that there was good precision for all periods of diffusion tube monitoring and also good overall data capture for the continuous analyser.

The diffusion tubes are supplied and analysed by Gradko International Ltd, a UKAS accredited laboratory, using a preparation method of 50% TEA in acetone. Gradko participate in the Workplace Analysis Scheme for Proficiency (WASP). In the most recent rounds for which performance data is available (R120 – R123), 100% of Gradko International results were determined to be satisfactory. This indicates that the laboratory does not have systematic sources of bias.

The local bias adjustment factor calculated from the triplicate tubes collocated with the automatic monitoring station at New Cross is 0.93. The data used in this calculation and the results can be seen in Appendix A. In order to err on the side of caution, this factor has not been used. Instead, the diffusion tube results presented in this report have been bias adjusted using the national factor for the relevant laboratory and preparation method. This has been obtained from the National Diffusion Tube Bias Adjustment Factor Spreadsheet Version 03/14 and gives a factor of 1.00 based on 17 studies.

Figure 2.2 Map of Non-Automatic Monitoring Sites

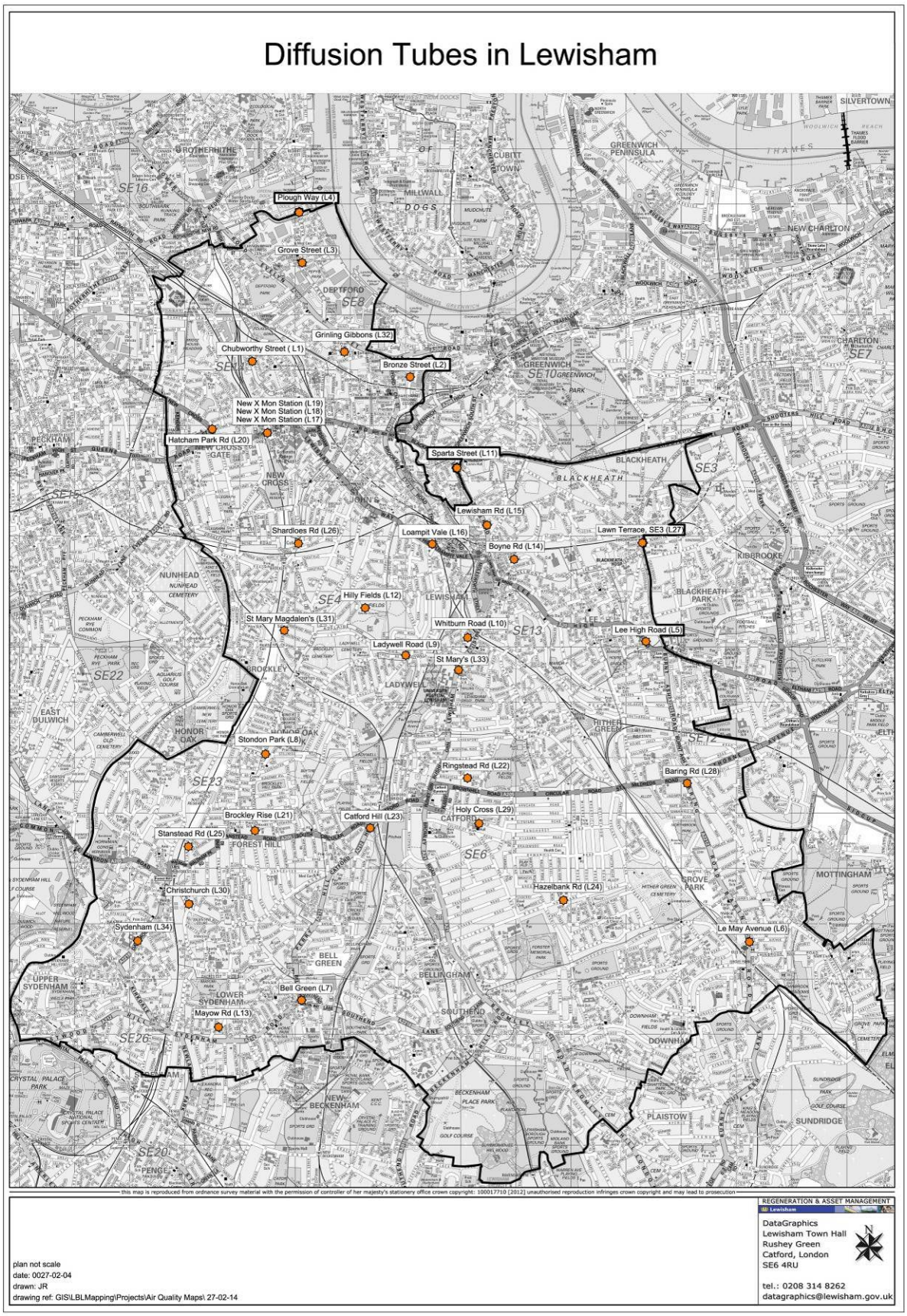


Table 2.3 Details of Non- Automatic Monitoring Sites for London Borough of Lewisham

Site ID	Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Site Height (m)	Pollutants Monitored	In AQMA?	Is Monitoring Co-located with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst-Case Exposure?
L1	Chubworthy St	Roadside	536111	177579	2.5	NO_2	Y	N	Y	2	N/A
L2	Bronze St	Urban Background	537549	177444	2.5	NO_2	Y	N	Y	6	N/A
L3	Grove St	Urban Background	536558	178470	2.5	NO_2	Y	N	Y	2	N/A
L4	Plough Way	Urban Background	536542	178921	2.5	NO_2	Y	N	Y	2	N/A
L5	Lee High Rd	Roadside	539664	175061	2.5	NO_2	Y	N	Y	5	Y
L6	Le May Ave	Urban Background	540618	172340	2.5	NO_2	N	N	Y	5	Y
L7	Bell Green	Roadside	536555	171804	2.5	NO_2	Y	N	Y	3	Y
L8	Stondon Park	Roadside	536229	174021	2.5	NO_2	Y	N	Y	5	Y

Site ID	Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Site Height (m)	Pollutants Monitored	In AQMA?	Is Monitoring Co-located with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst-Case Exposure?
L9	Ladywell Rd	Roadside	537491	174913	2.5	NO_2	Y	N	Y	3	Y
L10	Whitburn Rd	Roadside	538101	175073	2.5	NO_2	Y	N	Y	1	Y
L11	Sparta St	Roadside	538007	176517	2.5	NO_2	Y	N	Y	3	Y
L12	Footpath, Montague Avenue, Hilly Fields	Urban Background	537147	175353	2.5	NO_2	Y	N	N	60	N/A
L13	Mayow Rd	Urban Background	535798	171576	2.5	NO_2	N	N	Y	5	N/A
L14	Boyne Rd	Urban Background	538475	175785	2.5	NO_2	Y	N	Y	1	N/A
L15	Lewisham Rd	Roadside	538220	176100	2.5	NO_2	Y	N	Y	10	Y
L16	Loampit Vale	Roadside	537740	1155920	2.5	NO_2	Y	N	N	1.5	Y
L17	New Cross Monitoring Station	Roadside	536241	176932	2.5	NO_2	Y	Y	Y	6	Y

Site ID	Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Site Height (m)	Pollutants Monitored	In AQMA?	Is Monitoring Co-located with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst-Case Exposure?
L18	New Cross Monitoring Station	Roadside	536241	176932	2.5	NO_2	Y	Y	Y	6	Y
L19	New Cross Monitoring Station	Roadside	536241	176932	2.5	NO_2	Y	Y	Y	6	Y
L20	Hatcham Park Rd	Roadside	535759	176982	2.5	NO_2	Y	N	Y	4	Y
L21	Brockley Rise	Roadside	536130	173337	2.5	NO_2	Y	N	Y	3	Y
L22	Ringstead Rd	Urban Background	538055	173810	2.5	NO_2	Y	N	Y	0.5	N/A
L23	Catford Hill	Roadside	537180	173370	2.5	NO_2	Y	N	N	0.5	Y
L24	Hazelbank Rd	Urban Background	538960	172740	2.5	NO_2	N	N	Y	2	N/A
L25	Stanstead Rd	Urban Background	535536	173192	2.5	NO_2	Y	N	Y	10	N/A

Site ID	Site Name	Site Type	X OS Grid Reference	Y OS Grid Reference	Site Height (m)	Pollutants Monitored	In AQMA?	Is Monitoring Co-located with a Continuous Analyser (Y/N)	Relevant Exposure? (Y/N with distance (m) from monitoring site to relevant exposure)	Distance to Kerb of Nearest Road (m) (N/A if not applicable)	Does this Location Represent Worst-Case Exposure?
L26	Shardloes Rd	Roadside	536523	175925	2.5	NO_2	Y	N	Y	0.5	Y
L27	Lawn Terrace	Roadside	539640	175934	2.5	NO_2	Y	N	Y	0.5	Y
L28	Baring Rd	Roadside	540037	173748	2.5	NO_2	Y	N	Y	0.5	Y
L29	Holy Cross, Sangley Rd	Roadside	537817	173323	2.5	NO_2	Y	N	Y	5	Y
L30	Christchurch, Perry Vale	Roadside	535563	172740	2.5	NO_2	N	N	Y	5	Y
L31	St Mary Magdalen's RC, Howson Rd	Urban Background	536412	175131	2.5	NO_2	Y	N	Y	2	N/A
L32	Grinling Gibbons, Clyde St	Urban Background	536924	177707	2.5	NO_2	Y	N	Y	2	N/A

Site ID	**Site Name**	**Site Type**	**X OS Grid Reference**	**Y OS Grid Reference**	**Site Height (m)**	**Pollutants Monitored**	**In AQMA?**	**Is Monitoring Co-located with a Continuous Analyser (Y/N)**	**Relevant Exposure?** (Y/N with distance (m) from monitoring site to relevant exposure)	**Distance to Kerb of Nearest Road (m)** (N/A if not applicable)	**Does this Location Represent Worst-Case Exposure?**
L33	St Mary's CE, Lewisham High St	Roadside	538025	177707	2.5	NO_2	Y	N	N	2	Y
L34	Sydenham, Dartmouth Rd	Urban Background	535028	172327	2.5	NO_2	N	N	Y	5	N/A

2.2 Comparison of Monitoring Results with Air Quality Objectives

2.2.1 Nitrogen Dioxide (NO_2)

Automatic Monitoring Data

The data from the pollution monitors are set out in the sections below and the results compared to the relevant air quality objectives. Where an objective has been exceeded, the result is shown in bold type. Where an objective has been met but the result is borderline, the figure is in italics. Each of the pollutants for which monitoring data is available is considered in turn.

The results for the continuous sites that measure nitrogen dioxide are shown in Table 2.3 below. The results are for the years 2009 to 2013. All data is fully ratified.

Table 2.5 Results of Automatic Monitoring for NO_2: Comparison with Annual Mean Objective for London Borough of Lewisham

Site ID	Site Type	Within AQMA?	Valid Data Capture for Monitoring Period % [a]	Valid Data Capture 2013 % [b]	Annual Mean Concentration (µg/m^3)				
					2009	2010	2011	2012	2013
LW1	Urban Background	Y	n/a	100	**57**	**55**	**51**	**50**	**48**
LW2	Roadside	Y	n/a	98	**64**	**59**	**51**	**50**	**51**
LW4	Roadside	Y	n/a	98	n/a	n/a	n/a	**64** [c]	**57**

[a] i.e. data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

[b] i.e. data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%)

[c] Mean is "annualised" as in Box 3.2 of TG(09) - See Appendix A of 2013 Progress Report

Figure 2.3 Trends in Annual Mean NO_2 Concentrations Measured at Automatic Monitoring Sites

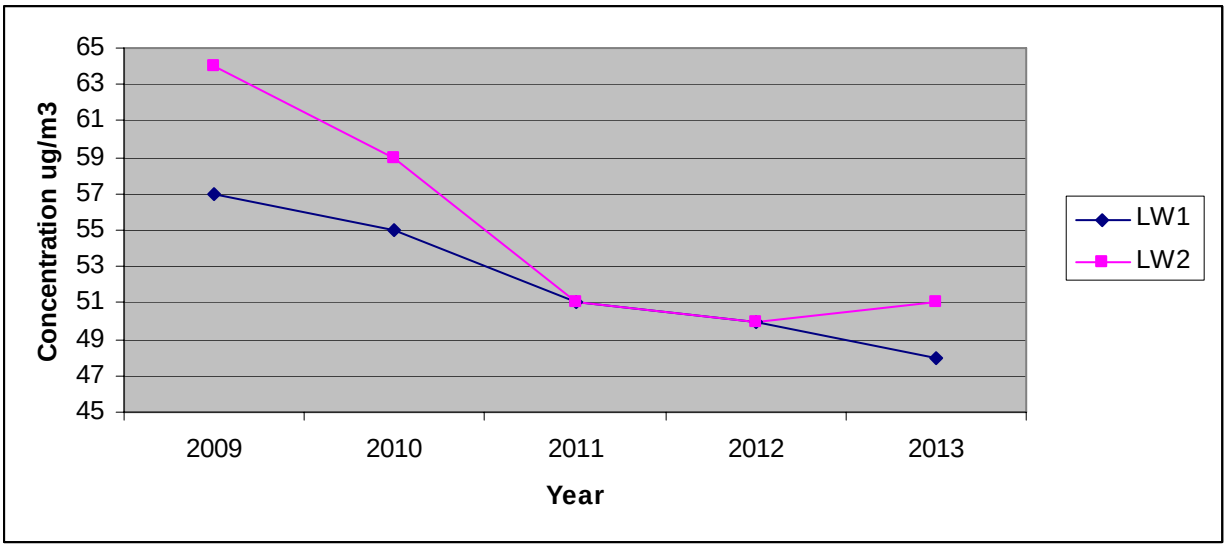


Fig 2.3 is a trend chart providing NO_2 annual mean results over the past 5 years at the Catford and New Cross automatic monitoring sites. This demonstrates that broadly there has been a gradual decline in annual concentrations over recent years. However in 2013 the New Cross roadside site (LW2), recorded an increase in the annual mean concentration. Monitoring only began at the Loampit Vale site in July 2012, so the site is not included in the above graph.

Table 2.7 Results of Automatic Monitoring for NO_2: Comparison with 1-hour Mean Objective for London Borough of Lewisham

Site ID	Site Type	Within AQMA?	Valid Data Capture for Monitoring Period % [a]	Valid Data Capture 2013 % [b]	Number of Hourly Means > 200µg/m^3				
					2009	2010	2011	2012	2013
LW1	Urban Background	Y	n/a	100	5	1	0	2	3
LW2	Roadside	Y	n/a	98	9	0	0	0	0
LW4	Roadside	Y	n/a	98	n/a	n/a	n/a	16(221.2) [c]	**26**

In bold, exceedance of the NO_2 hourly mean AQS objective (200µg/m^3 – not to be exceeded more than 18 times per year).

[a] i.e. data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

[b] i.e. data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%)

[c] If the data capture for full calendar year is less than 90%, include the 99.8th percentile of hourly means in brackets

Table 2.7 shows that levels of nitrogen dioxide are above the 1 hour mean objective at Loampit Vale, as the table shows Lewisham has not previously exceeded the short term objective for nitrogen dioxide in the last 4 years. This was despite the fact the annual mean concentration for nitrogen dioxide was 57 ug/m3 which is below the 60 ug/m3 which is an indicator that the short term objective may be exceeded

Diffusion Tube Monitoring Data

Table 2.9 Results of NO_2 Diffusion Tubes 2013 for Lewisham

Site ID	Location	Site Type	Within AQMA?	Triplicate or Co-located Tube	Full Calendar Year Data Capture 2013 (%)	2013 Annual Mean Concentration (µg/m^3) - Concentration (µg/m^3) - Bias Adjusted using National Adjustment factor of 1.00[ab]
L1	Chubworthy St	Roadside	Y	N	100	*38.6*
L2	Bronze St	Urban background	Y	N	100	29.6
L3	Grove St	Urban Background	Y	N	92	*37.1*
L4	Plough Way	Urban Background	Y	N	100	*37.3*
L5	Lee High Road	Roadside	Y	N	100	**43.3**
L6	Le May Avenue	Urban Background	N	N	92	*38.3*
L7	Bell Green	Roadside	Y	N	100	**53.8**
L8	Stondon Park	Roadside	Y	N	100	**48.6**
L9	Ladywell Rd	Roadside	Y	N	100	**40.5**
L10	Whitburn Rd	Roadside	Y	N	100	**46.2**
L11	Sparta Street	Roadside	Y	N	92	**47.4**
L12	Footpath, Montague Avenue,Hilly Fields	Urban Background	Y	N	100	34.9
L13	Mayow Rd	Urban Background	N	N	92	33.3

Site ID	Location	Site Type	Within AQMA?	Triplicate or Co-located Tube	Full Calendar Year Data Capture 2013 (%)	2013 Annual Mean Concentration (µg/m^3) - Concentration (µg/m^3) - Bias Adjusted using National Adjustment factor of 1.00[ab]
L14	Boyne Road	Urban Background	Y	N	100	34.7
L15	Lewisham Road	Roadside	Y	N	100	**47.6**
L16	Loampit Vale	Roadside	Y	N	100	**58.6**
L17	New Cross Monitoring Station	Roadside	Y	Y (Both)	100	**53.7**
L18	New Cross Monitoring Station	Roadside	Y	Y(Both)	100	**53.7**
L19	New Cross Monitoring Station	Roadside	Y	Y(Both)	100	**53.7**
L20	Hatcham Park Road	Roadside	Y	N	100	**44.7**
L21	Brockley Rise	Roadside	Y	N	100	**54.0**
L22	Ringstead Road	Urban Background	Y	N	100	33.5
L23	Catford Hill	Roadside	Y	N	92	**59.9**
L24	Hazelbank Road	Urban Background	Y	N	100	36.3
L25	Stanstead Rd	Urban background	Y	N	100	27.5
L26	Shardloes Rd	Roadside	Y	N	100	**51.9**
L27	Lawn Terrace	Roadside	Y	N	100	37.2

Site ID	Location	Site Type	Within AQMA?	Triplicate or Co-located Tube	Full Calendar Year Data Capture 2013 (%)	2013 Annual Mean Concentration (µg/m^3) - Concentration (µg/m^3) - Bias Adjusted using National Adjustment factor of 1.00[ab]
L28	Baring Rd	Roadside	Y	N	100	**61.9**
L29	Holy Cross, Sangley Rd	Roadside	Y	N	100	33.3
L30	Christchurch, Perry Vale	Roadside	N	N	100	34.3
L31	St Mary Magdalen's RC Howson Rd	Urban Background	Y	N	75	29.6
L32	Grinling Gibbons, Clyde St	Urban Background	Y	N	100	31.6
L33	St Mary's, Lewisham High St	Roadside	Y	N	92	**51.0**
L34	Dartmouth Rd	Urban Background	N	N	83	34.0

In bold, exceedance of the NO2 annual mean AQS objective of 40µg/m^3

Borderline results are illustrated in italics.

Underlined, annual mean > 60µg/m^3, indicating a potential exceedance of the NO_2 hourly mean AQS objective

b As set out in 2.1.2, Lewisham considers it more appropriate to use the National Bias Adjustment Factor of 1.00

Table 2.11 Results of NO_2 Diffusion Tubes (2009 to 2013) for Lewisham

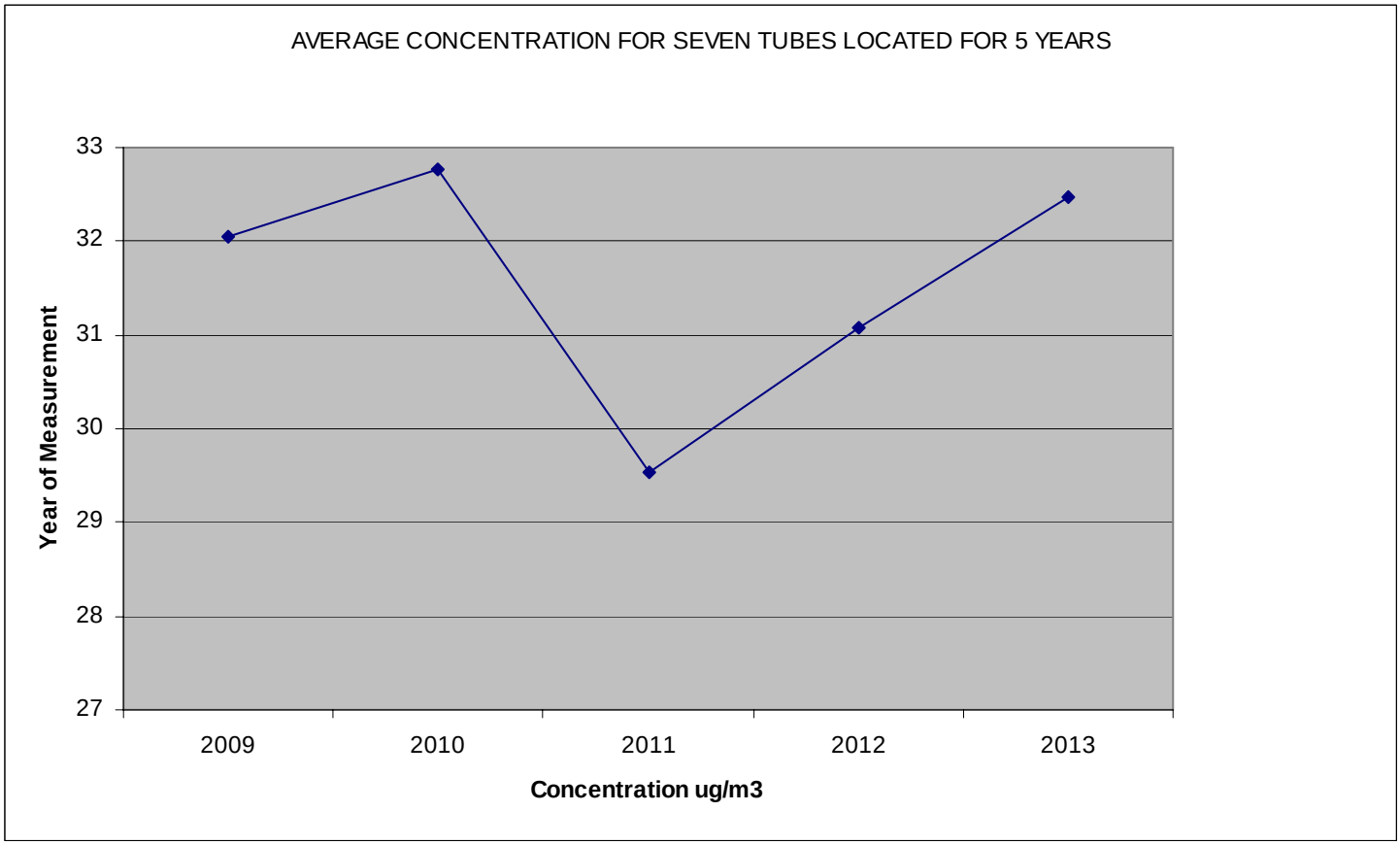
Site ID	Site Type	Within AQMA?	Annual Mean Concentration (µg/m^3) - Adjusted for Bias [a]				
			2009 (Bias Adjustment Factor = 0.97)	2010 (Bias Adjustment Factor = 1.03)	2011 (Bias Adjustment Factor = 0.94)	2012 (Bias Adjustment Factor = 1.01)	2013 (Bias Adjustment Factor = 1.00)
L1	Roadside	Y	--	--	*36.4*	*37.8*	*38.6*
L2	Urban background	Y	--	--	29.7	31.0	29.6
L3	Urban Background	Y	--	--	34.7	*37.9*	*37.1*
L4	Urban Background	Y	--	--	*37.2*	34.9	*37.3*
L5	Roadside	Y	--	--	*36.6*	*39.0*	**43.3**
L6	Urban Background	N	--	--	35.9	*37.5*	*38.3*
L7	Roadside	Y	--	--	**48.3**	**53.4**	**53.8**
L8	Roadside	Y	--	--	**44.5**	**44.8**	**48.6**
L9	Roadside	Y	--	--	39.9	**40.6**	**40.5**
L10	Roadside	Y	--	--	**43.2**	**44.0**	**46.2**
L11	Roadside	Y	--	--	**44.9**	**40.0**	**47.4**
L12	Urban Background	Y	--	--	30.7	33.7	34.9
L13	Urban Background	N	--	34.9	29.7	32.3	33.3
L14	Urban Background	Y	35.0	33.3	33.5	34.5	34.7
L15	Roadside	Y	**48.2**	**47.8**	**43.6**	**44.3**	**47.6**
L16	Roadside	Y	**58.2**	**61.3**	**48.7**	**55.0**	**58.6**
L17	Roadside	Y	**69.3**	**75.2**	**75.4**	**59.2**	**53.7**
L18	Roadside	Y	**69.3**	**75.2**	**75.4**	**59.2**	**53.7**

Site ID	Site Type	Within AQMA?	Annual Mean Concentration (µg/m^3) - Adjusted for Bias [a]				
			2009 (Bias Adjustment Factor = 0.97)	2010 (Bias Adjustment Factor = 1.03)	2011 (Bias Adjustment Factor = 0.94)	2012 (Bias Adjustment Factor = 1.01)	2013 (Bias Adjustment Factor = 1.00)
L19	Roadside	Y	**69.3**	**75.2**	**75.4**	**59.2**	**53.7**
L20	Roadside	Y	--	**54.1**	**42.4**	**45.4**	**44.7**
L21	Roadside	Y	**55.4**	**60.9**	**52.6**	**54.0**	**54.0**
L22	Urban Background	Y	*37.2*	33.1	35.4	34.3	33.5
L23	Roadside	Y	**56.0**	**56.1**	**54.0**	**56.5**	**59.9**
L24	Urban Background	Y	30.2	33.4	29.0	35.1	*36.3*
L25	Urban background	Y	26.6	30.8	28.3	28.3	27.5
L26	Roadside	Y	**58.8**	**53.8**	**49.7**	**48.0**	**51.9**
L27	Roadside	Y	*39.6*	*38.5*	34.6	*37.3*	*37.2*
L28	Roadside	Y	**48.1**	**60.7**	**51.9**	**59.3**	**61.9**
L29	Roadside	Y	30.7	35.1	29.9	32.1	33.3
L30	Roadside	N	30.3	33.0	27.8	31.1	34.3
L31	Urban Background	Y	28.1	30.7	23.2	25.4	29.6
L32	Urban Background	Y	32.3	35.3	29.7	29.6	31.6
L33	Roadside	Y	**59.5**	**54.7**	**47.1**	**51.4**	**51.0**
L34	Urban Background	N	35.0 [a]	32.7	27.6	30.4	34.0

In bold, exceedance of the NO_2 annual mean AQS objective of 40µg/m^3. Underlined, annual mean > 60µg/m^3, indicating a potential exceedance of the NO_2 hourly mean AQS objective

Figure 2.4 Trends in Annual Mean Nitrogen Dioxide Concentrations Measured at Diffusion Tube Monitoring Sites

The below trend chart show the average concentration at urban background tube locations for the 7 tubes which have been located for at least 5 years. It shows there is not a clear trend or decline in nitrogen dioxide displayed at the diffusion tubes ;located at urban background sites.



2.2.2 Particulate Matter (PM_{10})

Data for Particulate Matter is presented below.

Table 2.13 Results of Automatic Monitoring for PM_{10}: Comparison with Annual Mean Objective for London Borough of Lewisham

Site ID	Site Type	Within AQMA?	Valid Data Capture for Monitoring Period % [a]	Valid Data Capture 2013 % [b]	Confirm Gravimetric Equivalent (Y or N/A)	Annual Mean Concentration (µg/m^3)				
						2009	2010	2011	2012	2013
LW2 New Cross	Roadside	Y	n/a	99	Y	25	25	26	26 [c]	23
LW3 mw	Industrial	Y	n/a	96	Y	n/a	23	23	22	24
LW4 LP	Roadside	Y	n/a	95	Y	n/a	n/a	n/a	24.3 [d]	28

In bold, exceedence of the PM_{10} annual mean AQS objective of 40µg/m^3

[a] i.e. data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

[b] i.e. data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%)

[c] Means should be "annualised" as in Box 3.2 of TG(09) (http://laqm.defra.gov.uk/technical-guidance/index.html?d=page=38), if valid data capture is less than 75%

d Monitoring began in July so mean has been "annualised" as in Box 3.2 of TG(09) (http://laqm.defra.gov.uk/technical-guidance/index.html?d=page=38)

Table 2.15 Results of Automatic Monitoring for PM_{10}: Comparison with 24-hour Mean Objective for London Borough of Lewisham

Site ID	Site Type	Within AQMA?	Valid Data Capture for Monitoring Period % [a]	Valid Data Capture 2013 % [b]	Confirm Gravimetric Equivalent (Y or N/A)	Number of Daily Means > 50µg/m^3				
						2009	2010	2011	2012	2013
LW2 New Cross	Roadside	Y	n/a	99%	Y	12	6	19	15 [c] (47.0)	15
LW3 mw	Industrial	Y	n/a	96%	Y	n/a	4 [c] (39)	22	20	13
LW4 LP	Roadside	Y	n/a	95%	Y	n/a	n/a	n/a	3 [c] (35.9)	19

In bold, exceedence of the PM_{10} daily mean AQS objective (50µg/m^3 – not to be exceeded more than 35 times per year)

[a] i.e. data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

[b] i.e. data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%)

[c] if data capture for full calendar year is less than 90%, include the 90.4th percentile of 24-hour means in brackets

2.2.3 Sulphur Dioxide (SO_2)

Monitoring of SO2 has been carried out at Lewisham 1 (Catford) and Lewisham 2 (New Cross) for many years. The results detailed in Table 2.17 show that concentrations continue to remain at very low levels at both sites and that all AQS objectives for this pollutant are being met. Although data capture was just below 90% at Catford, but the relevant percentiles have been included. The results give a strong indication that concentrations are low throughout the year.

Table 2.17 Results of Automatic Monitoring for SO_2: Comparison with Objectives for London Borough of Lewisham

Site ID	Site Type	Within AQMA?	Valid Data Capture for Monitoring Period % [a]	Valid Data Capture 2013 % [b]	Number of: [c]		
					15-minute Means > 266µg/m^3	1-hour Means > 350µg/m^3	24-hour Means > 125µg/m^3
LW1 Catford	Urban Background	Y	n/a	89%	0 (32.8)	0 (20.8)	0 (16.5)
LW2 New Cross	Roadside	Y	n/a	99%	0	0	0

In bold, exceedence of the relevant AQS objective (15-min mean = 35 allowed/year; 1-hour mean = 24 allowed/year; 24-hour mean = 3 allowed/year)

[a] i.e. data capture for the monitoring period, in cases where monitoring was only carried out for part of the year

[b] i.e. data capture for the full calendar year (e.g. if monitoring was carried out for six months the maximum data capture for the full calendar year would be 50%)

[c] if data capture for full calendar year is less than 90%, include the relevant percentile in bracket (in µg/m^3): 15-min mean = 99.9th ; 1-hour mean = 99.7th ; 24-hour mean = 99.2th percentile

2.2.4 $PM_{2.5}$

The EU Limit Value and target for $PM_{2.5}$ is set at 25µg/m^3 measured as an annual mean to be met by 2015 with a further indicative limit value of 20 µg/m^3 to be achieved by 2020. The UK Air Quality Strategy has also set an exposure reduction objective, which in this case is a 15% reduction between 2010 and 2020. However, objectives for $PM_{2.5}$ have not yet been included in the system of Local Air Quality Management for England.

An FDMS $PM_{2.5}$ monitor was installed in Lewisham 2 (New Cross) in April 2012. However, this was causing the monitoring enclosure to overheat so it had to be switched off until new air conditioning could be installed. Therefore, data capture for the year was only 34%. The average daily mean for the period 12 April – 31 July 2012 for which data is available at the New Cross site is 11.74µg/m^3. After annualising using data from background sites in London, this gives an annual average for New Cross of 13.03µg/m^3. Therefore, this is significantly lower than the EU Limit Value for 2015 and the indicative limit value for 2020.

In 2013, data capture was 98% and the average daily mean was 17.5 µg/$m^{3,}$ This is below the limit value of 25 µg/$m^{3.}$

2.2.5 Ozone

The UK Air Quality Strategy sets an 8-hour mean objective for O_3 of no more than 10 exceedances of 100µg/m^3. The table below shows data from the Lewisham 1 (Catford) site for O3 over recent years. As can be seen, the national objective has been met at this site for all years. However, 2012 was the first year since 2008 to have any 8-hour means above the 100µg/m^3 threshold.

Table 2.10 Results of Automatic Monitoring for O_3: Comparison with 8-hour Mean Objective

Site ID	Site Type	Within AQMA?	Valid Data Capture for Monitoring Period % [a]	Valid Data Capture 2013 % [b]	Number of 8-hour Rolling Means > 100µg/m^3				
					2009	2010	2011	2012	2013
Lewisham 1 (Catford)	Urban background	Y	n/a	97	0	0	0	3	0

2.2.6 Summary of Compliance with AQS Objectives

London Borough of Lewisham has examined the results from monitoring in the borough.

Concentrations within the AQMAs still exceed the objectives for nitrogen dioxide and the AQMAs should remain. Of concern is exceedance of the short term objective for nitrogen dioxide at the automatic monitor at Loampit Vale. There was also a diffusion tube, L28 Baring Road which recorded a level above 60 ug/m3 which indicates the short term objective may be exceeded at this location. It is important to note that if the local adjustment factor had been used it would have been just below 60, but is something that Lewisham needs to monitor closely. L5 Lee High Road is now above the objective in 2013, this tube showed a gradual increase over the period 2011 to 2013. Concentrations at all other locations outside of the AQMAs are all below the objectives at relevant locations.

The first five AQMAs were also declared for particulate matter in addition to nitrogen dioxide. Although exceedances of the objectives for particulate matter have not been recorded this year, in view of future intense development planned in the Borough it was appear prudent to retain declaration and review again at the next progress report. Strict conditions applied during the planning process should be sufficient to control emissions from construction sites. The objectives for all other pollutants are being met. Therefore there is no need to proceed to a Detailed Assessment.

London Borough of Lewisham has examined the results from monitoring in the borough.

Concentrations within the AQMA still exceed the objectives for nitrogen dioxide and the AQMAs should remain.

Concentrations outside of the AQMA are all below the objectives at relevant locations, therefore there is no need to proceed to a Detailed Assessment.

3 New Local Developments

London Borough of Lewisham confirms that there are no new or newly identified local developments which may have an impact on air quality within the Local Authority area.

London Borough of Lewisham confirms that all the following have been considered:

- **Road traffic sources**
- **Other transport sources**
- **Industrial sources**
- **Commercial and domestic sources**
- **New developments with fugitive or uncontrolled sources.**

4 Planning Applications

Major planning applications are subject to Air Quality Assessments to ensure they comply with air quality planning policies and local transport plans and strategies and Climate Change Strategies. Planning conditions and s106 requirements were applied as appropriate.

Of particular significance a supplementary Environmental Statement, was submitted as part of the reserved matters application for the first phase of the Lewisham Gateway Development, Building A and Confluence Place. This phase of the development includes 200 apartments with ground floor commercial use and an energy centre. This statement was in addition to the 2006 Environmental Statement and 2007 Environmental Statement Addendum.

The report concluded that nitrogen dioxide concentrations were higher than in the in aforementioned Environmental Statement and Addendum, as air quality has not improved as expected. Concentrations of PM10 and PM2.5 are below the air quality objectives. A slight adverse impact on annual mean nitrogen dioxide concentrations was predicted at existing properties. A number of proposed properties at the development were likely to exceed the annual mean nitrogen dioxide objective, this has been addressed by providing mechanical ventilation with air drawn from higher up the façade.

On 17th October 2013 the Mayor of London received a request to become the local planning authority for purpose of deciding planning application for the Convoy's Wharf site, a public hearing was held March 2014 which will reported on in the 2015 Progress report

5 Air Quality Planning Policies

In January 2011, London Borough of Lewisham published a Supplementary Planning Document on Planning Obligations. The document, which can be accessed on the Council website,
http://www.lewisham.gov.uk/myservices/planning/policy/Documents/PlanningObligationSPD.pdf
serves to make the process of determining suitable planning obligations clear and transparent.

The London Borough of Lewisham submitted its Local Plan for Lewisham Town Centre and this was adopted February 2014. The plan sets out a suite of policies and proposals for development. The plan guides where and how development should take place over the next five to ten years and it will be used to determine planning applications. The Catford Town Centre Local Plan was withdrawn from examination in December 2013, this was because further work was required on proposed relocation of the A205. More information is available at London Borough of Lewisham's Local Development Framework pages
http://www.lewisham.gov.uk/myservices/planning/policy/LDF/Pages/default.aspx

6 Local Transport Plans and Strategies

The Local Implementation Plan for the London Borough of Lewisham was published in April 2011. This is a statutory document which supports the delivery of the Mayor's Transport Strategy and enables the borough to plan strategically for transport taking into account future needs. The current LIP covers the period up to 2031

7 Climate Change Strategies

A Carbon Reduction and Climate Change Strategy for the London Borough of Lewisham was published in July 2008. The document is publicly available and can be viewed on the Council website

8 Implementation of Action Plans

8.1 Action Plan for London Borough of Lewisham

Table 8.1 Action Plan Progress for London Borough of Lewisham

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
1	Support for and promotion of the implementation of the London Low Emission Zone	Make information on the LEZ publicly available and to promote the extension of the LEZ to include a wider range of vehicles.	GLA	Adoption of a London-wide LEZ; Categories of vehicle to which standards apply.	High	The whole of LB Lewisham is within the LEZ. Phases I, II and III have been introduced.	Information on the London LEZ is available via a link on the Council website.	Enforcement of the LEZ is ongoing.	TfL estimates that including larger vans and minibuses in the LEZ in January 2012 will reduce emissions of Particulate Matter (PM) by around 80 tonnes and emissions of Oxides of Nitrogen (NOX) by around 1,200 tonnes by 2015.
2	Vehicle Emissions Testing	To educate drivers about emissions from their vehicles and ensure that vehicles meet	LBL	% of vehicles failing to meet the MOT emission	Low	Voluntary Vehicle Emissions Testing Days were carried	A further Vehicle Emissions Testing Day was carried out in March 2013. The theme	Voluntary Vehicle Emissions Testing will be carried out on	Owing to weather conditions, limited testing was carried

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
		emissions standards.		standards during testing.		out in March & September 2011	of the day was expanded to cover sustainable transport to generate additional interest.	when funding permits.	out during the event in 2013. However, it was an opportunity to engage the public and distribute information.
3	Measures to Address Idling Engines	Discourage Engine Idling through information and education.	LBL	No. of Complaints about idling engines validated; No. of signs advising drivers to switch off engines erected.	V Low	Logging and mapping of complaints now being carried out.	System for reporting incidents of engine idling introduced on Council webpage. Complaints are recorded and location considered for advisory signage to be erected.	Ongoing	The impacts will depend on reporting and responses to education. Emission reductions will tend to be localised.
4	Encourage Cleaner Technology/Alternative Fuels in Council Fleet	Increase number of Council and Contractors' Vehicles that use cleaner technology/alternative fuels; Provision of alternative refuelling locations; Driver training.	LBL	Number of fleet vehicles using different types of cleaner technology; Fleet fuel consumption; Reduction in emissions of NOx and	Medium	All Council fleet meets Euro V standards. 40 vehicles use LPG. 5% biodiesel used across the whole fleet. By end March 2012, 10	At end March 2013, the fleet included 10 electric hybrid vehicles and 2 Toyota IQ low emission vehicles. Trials of electric vehicles (Nissan Leaf) have been carried out. The fleet is regularly		NI194 no longer used to monitor PM10 and NOx emissions from Council's own fleet. However, Carbon emissions continue to be monitored and

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
				PM_{10} from Council's fleet; Number of alternative refuelling points available.		combustion engine cars and 1 diesel engine refuse truck had been replaced with electric Hybrid vehicles. Sainsbury's has 2 EVCPs at their Sydenham site while LPG available at one local Shell service station.	being reviewed to identify need and where a switch to electric/hybrid can be made. LBL is a member of Source London and has 10 publicly accessible, twin electric vehicle charging points installed including 3 on-street. Discussions commenced with French company appointed to take over management of the Source London Scheme from TfL. New scheme operator BluePointLondon plans to role out new electric point to point car club.		are being used as a marker.
5	Encourage Cleaner Technology/Alternative Fuels in Public Transport	To support TfL initiatives aimed at making public transport within LBL cleaner.	TfL / LBL	Buses operating within LBL that use cleaner	Medium	TfL responsible for co-ordinating public	TfL have embarked on a programme to reduce emissions from its bus fleet	Ongoing	TfL aim to achieve a 20% reduction in NOx emissions

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
				technology / alternative fuels; PTAL map of borough		transport within the borough.	through retrofitting and replacement. A study undertaken to identify and prioritise suitable bus routes to start the programme considered routes 47 and 172 which run through the borough.		from its fleet by 2015 based on a 2012 baseline.
9	Encourage and Promote the Use of Travel Plans	LBL to have Travel Plan in place and regularly review it. Promote the adoption of Travel Plans among major employers within the borough.	LBL	Results from Lewisham Council's Staff Travel Survey. Number of local businesses with Travel Plans in place. % of schools with School Travel Plan in place.	Low		The percentage of schools with a School Travel Plan is 78 out of 97 schools. (80.4%).		
10	Promote and publicise improvements to public transport.	Provision of information to LBL residents about public transport improvements.	LBL	Trends in modal shifts within LBL – Proportion of journeys	Low to Medium	Public Transport infrastructure in Lewisham as of March	In June 2011, the Evening Standard reported that passenger numbers on the		Fares for public transport were increased in January 2012,

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
				made by public transport.		2013 was: 20 main line stations (6 of which provide interchanges with the London Overground network), 3 DLR stations, 42 bus routes and 1 designated wharf. London Borough of Lewisham produced a handy pocket guide to public transport in the borough which has been given out to residents at events.	East London Line had doubled within a year of its opening. Owing to high passenger demand, works have been ongoing on the London Overground Capacity Improvement Programme to increase the capacity on the trains. LBL continued to play a pivotal role in keeping residents informed about the nature of these works and to raise awareness of the future benefits.		averaging a 5.6% rise but up to 8% on some services. These fare increases may deter public transport use.
11	Promotion of Walking	Encourage walking instead of use of motor vehicles and	LBL	Trends in modal shifts within LBL –	Low	Walking Map and Walking Strategy	LB Lewisham has begun a programme to roll		

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
		make access to services easier on foot		Proportion of journeys made on foot; Traffic on Walkit.com for routes in LBL area.		produced. Lewisham borough is covered by Walkit.com, links to the site are on the Council website and it has been widely promoted. Printed information on local walks available and organised walks for leisure are promoted on the Council webpage.	out Legible London way-finder signage in the borough. A mixture of monoliths and miniliths were installed in Blackheath, Lewisham and Sydenham. 50% schools participated in Walk once a week (WOW) and a further 20% completed walk to school month.		
12	Promotion of Cycling	Encourage cycling instead of use of motor vehicles through improvements to infrastructure and security.	LBL / TfL	Trends in modal shifts within LBL – Proportion of journeys made by bike; No. Of people receiving cycle training;	Low	Maps of cycle routes and cycle parking facilities available on Council website. National Route 21 runs through the	LB Lewisham has been involved in ongoing discussions on the extent of Cycle Superhighway 5 to ensure that maximum benefits for cyclists are		

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
				No. Of Council staff taking up Bike Loan Scheme.		borough.	secured. A new cycle loan scheme introduced to encourage people who are new to cycling or have reservations to trial a bike for 1 month. LB Lewisham have been working with Sky Ride Local to promote cycle rides within and around the borough. Free cycle training provided to children and adults. Bike doctor sessions held at several events. 1000 year 6 children on average a year do bike ability to level		

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
							2. Roughly 500 adults have taken a 2 hour lesson		
13	Management of Parking	To ensure that parking provisions are appropriate to the nature of the area through designation of zones and enforcement.	LBL / TfL	Changes to Controlled Parking Zones implemented; No. of consultations on parking restrictions undertaken; No. of members of Streetcar.	Low - Medium	There were 19 Controlled Parking Zones in place at end of 2012. The times of the controls are varied but all information is provided on the Council website.	Parking Policy Review conducted to re-examine parking restrictions within the borough and how parking demand can be better managed. Total number of car club bays in March 2013 was 64.		Management of Parking is a balance between discouraging car use and providing adequate facilities where required. We will aim to monitor the impacts on air quality from introducing further parking controls.
14	Speed Management	To manage speed in a way that promotes a smoother flow of traffic while ensuring road safety.	LBL / TfL	Number of 20mph zones implemented; methods used to manage speed; Average speed	Low	64% of the Borough's roads (not inc. TLRN) had speed management measures in place by March 2013.	The total of Borough's roads (not inc. TLRN) with speed management is 65.8%.		

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
				measures.					
16	Reduce Emissions from New Developments	Using the planning system to ensure that emissions from new developments are minimised	LBL	No. of major applications approved that are to be car-free; No. of new developments required to provide car club schemes and/or electric vehicle charging points; No. of biomass boilers approved;	Medium	All planning applications proposing a biomass boiler are required to produce an Air Quality Assessment.	As set out in section 3.4, the number of applications for new biomass boilers reduced to 0 in the last financial year. Out of the major and large residential developments that were completed six of those sites were car free developments. This was an improvement on the previous year by one. The number of electric charging points in the borough remained at 14. An update was not available for 12/13 but the		

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
							annual planning monitoring report for 11/12 recorded that 48 carclub spaces were secured across 14 developments and there were 2,695 units with free membership.		
17	Reduce Emissions from Commercial Construction Sites	To ensure that construction sites manage emissions and comply with the Clean Air Act 1993.	LBL	Major developments adopting mitigation measures from London Councils Code of Construction Practice. No. of dark smoke complaints received and investigated.	Low – Medium	For larger developments, applicants are requested to conduct an Air Pollution Risk Assessment according to IAQM guidance. Developers are required to refer to the London Councils Code of Construction Practice which is available on Council	The guidance and advice for developers available on the Council website has been reviewed. LB Lewisham produced new updated guidance for minimising emissions from construction and demolition		The impacts will be greater in the immediate vicinity of construction sites and will primarily deliver improvements to PM concentrations

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
						website. Appropriate mitigation measures are secured for the development.			
18	Reduce Emissions from Domestic Buildings	To ensure that domestic properties are complying with the Clean Air Act 1993 and to discourage domestic properties from having bonfires. Also to work with carbon reduction strategies where there are simultaneous benefits for ambient air quality.	LBL	No. of complaints about unauthorised fuel use received and investigated. No. of complaints about domestic bonfires received and investigated.	V. Low	System for reporting air pollution issues made available on the Council website. A system of monitoring and recording of complaints put in place.	Complaints received and investigated about unauthorised fuel use. Advice given and cases resolved. Links providing information on authorised fuels and exempt appliances available on Council webpage.		
19	Control the Release of Emissions from Industrial and Commercial Premises	Ensure that all industrial installations falling under LAPPC / IPPC regime are regulated and inspected.	LBL / EA	No. of installations requiring authorisation; No. of installations inspected; Enforcement	Low		68 installations were permitted under EPR. Inspections completed as per Defra requirements.		

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
				action taken or required against industrial installations.					
20	Assess Air Quality Levels and Increase Awareness of Air Quality Issues	Monitor air quality levels within the borough, analyse trends and disseminate information to the public.	LBL	No. of pollution monitors operating within LBL; Trends in air quality; Exceedances of Air Quality Objectives; No. of awareness-raising / educational campaigns undertaken.	Low	Automatic monitoring stations operating in New Cross, Catford and Mercury Way. Diffusion tubes located in 32 different locations including one triplicate collocated with the automatic monitor at New Cross.	Participation at various events to raise awareness of air quality and disseminate information, such as Lewisham's Peoples Day and presentation delivered to Local Breathe Easy Group. Liaised with the public health team to produce information for the Joint Needs Strategic Assessment. Work continued on the development of an air quality website for South London in preparation for		Although the emission reductions from this measure are relatively low, this action is very important for measuring effectiveness of other actions as well as for education and awareness raising.

No.	Measure	Focus	Lead authority	Indicator	Target annual emission reduction in the AQMA	Progress to date	Progress in last 12 months	Estimated completion date	Comments relating to emission reductions
							2014 launch.		
21	Implement Procurement Measures to Reduce Overall Pollution Levels	To ensure that Council's own procurement has the least possible impact on air quality by having an established policy in place.	LBL		Low	A revised version of the Council's Green Procurement Guide was published in July 2008 and is available on the Council website. http://www.lewisham.gov.uk/NR/rdonlyres/44EF75C5-E537-4DD0-ADF8-EFA36DF97C50/0/GuideToGreenProcurementAprilSmall.pdf	Lewisham Council received the Indirect Engager Special Award for its groundbreaking work in assessing its carbon footprint across the supply chain and encouraging suppliers to reduce emissions.		

Funding from the Mayor's Air Quality Fund for an individual bid in the new air quality management area was confirmed late 2013, this funding will support a number of measures in the above action plan and this will be reported on in the next progress report.

9 Conclusions and Proposed Actions

9.1 Conclusions from New Monitoring Data

Monitoring within the Borough confirmed that the annual mean nitrogen dioxide objective continues to be widely exceeded at roadside at roadside locations. The council monitors at three sites continuously and 32 locations across the Borough using diffusion tubes. The continuous monitors at an urban background and roadside sites exceeded the annual mean objective. In addition the automatic monitor at Loampit Vale exceeded the short term objective for nitrogen dioxide. 15 of the 32 diffusion tube locations exceeded the annual mean objective, these sites were all roadside sites, one diffusion tube exceeded an annual mean of 60 µg m-3. Monitored NO_2 concentrations are consistent with the currently declared AQMAs.

Monitored PM_{10} concentrations in Lewisham are below the air quality objectives. However the AQMAs for PM_{10} are retained as a precautionary measure due to the significant number of exceedances of the 24-hour mean concentrations and current scale of development in the Borough, which continues into 2014.

9.2 Conclusions relating to New Local Developments

The Council has assessed the likely impacts of local developments for road transport, other transport, industrial processes, commercial and domestic sources and fugitive and uncontrolled emissions. The assessment of sources did not identify the requirement to proceed to a Detailed Assessment.

9.3 Other Conclusions

Sustained progress has been made with the Air Quality Action Plan, this has included sustained engagement work to raise awareness of air quality through events such as Lewisham's People's Day and affective liaison with other council teams such as Public Health to provide information to Joint Needs Strategic Assessment. Funding was awarded to the London Borough of Lewisham from the Mayor's Air Quality Fund, which will support measures included in the air quality action plan.

9.4 Proposed Actions

The London Borough of Lewisham will retain the current AQMAs in their entirety, but proposes to monitor the sensitivity of particulate matter monitoring results to recent large scale development in the Borough, such as the Lewisham Gateway development. Monitoring results of 2014 to be reported in the 2015 Progress Report will confirm whether a detailed assessment is required to investigate possible revocation of 5 of the AQMAs which are declared for both nitrogen dioxide and particulate matter.

10 References

WASP rounds 116 to 123, January 2012 – December 2013 available at http://laqm.defra.gov.uk/documents/LAQM-WASP-Rounds-116-123-(January-2012--December-2013)-NO2-report.pdf

London Borough of Lewisham Tube Study 2013 prepared by Aecom July 2014 and available to view at http://www.lewisham.gov.uk/myservices/environment/air-pollution/Documents/LewishamNO2DiffusionTube%20AnnualReport%202013.pdf

London Borough of Lewisham, Lewisham Employment Land Study (2008) available at http://www.lewisham.gov.uk/myservices/planning/policy/Documents/LewishamEmploymentLandStudy2009.pdf

Technical Guidance LAQM.TG(09) published by DEFRA (Department for Environment, Food and Rural Affairs)

The London Air Quality Network website at http://www.londonair.org.uk

The Review and Assessment Helpdesk website at http://www.uwe.ac.uk/laqm/review/

The UK National Air Quality Information Archive website at http://www.airquality.co.uk

Appendices

Appendix A: Quality Assurance / Quality Control (QA/QC) Data

Appendix B: Monthly Unbiased NO2 Diffusion Tube Results (µg/m3)

Appendix C: List of Part B Processes within London Borough of Lewisham

Appendix A: QA:QC Data

Diffusion tubes for nitrogen dioxide are provided and analyzed by Gradko, 50% TEA in acetone and bias adjustment was 1:00 based on 17 studies as per version 03/14. More detail of QA and QC are detailed in the 2013 diffusion tube survey produced by Aecom for London Borough of Lewisham, the survey provides detail on how Gradko International and Aecom who complete tube changeovers operate according to Technical Guidance 2009 and Diffusion Tube Practical Guidance. Use of laboratory and field blanks are detailed within the survey.

Diffusion Tube Bias Adjustment Factors

Diffusion Tube Bias Adjustment Factors 03/14 Issue of the Spreadsheet				
			New (03/14) Factor	
Laboratory	Method	Year	No. of Studies	Factor
Aberdeen Scientific Services	20% TEA in water	2013	1	0.83
Edinburgh Scientific Services	50% TEA in acetone	2013	1	0.79
ESG Didcot	20% TEA in water	2013	2	0.76
ESG Didcot	50% TEA in acetone	2013	28	0.80
ESG Glasgow	20% TEA in water	2013	1	0.72
ESG Glasgow	50% TEA in acetone	2013	1	0.73
Exova	20% TEA in water	2013	1	0.91
Glasgow Scientific Services	20% TEA in water	2013	5	0.99
Gradko	20% TEA in water	2013	24	0.95
Gradko	**50% TEA in acetone**	**2013**	**17**	**1.00**
Kent Scientific Services	20% TEA in water	2013	1	0.77
Kirklees Council	50% TEA in acetone	2013	2	0.74
Lambeth Scientific Services	50% TEA in acetone	2013	1	0.83
Milton Keynes Council	20% TEA in water	2013	1	0.84
Northampton BC	20% TEA in water	2013	4	0.73
Somerset County Council	20% TEA in water	2013	3	0.90
South Yorkshire Air Quality Samplers	50% TEA in acetone	2013	3	0.84
Staffordshire Scientific Services	20% TEA in water	2013	11	0.87
Tayside Scientific Services	20% TEA in water	2013	1	0.78
West Yorkshire Analytical Services	50% TEA in acetone	2013	7	0.79
	Number of Studies Included		**115**	

7 studies were submitted but could not be included due to less than 9 valid data periods or poor data quality.

Some Councils were unable to supply their studies as automatic data processing was incomplete by 14th March 2014.

Comparison of automatic monitoring data with triplicate diffusion tube data

Factor from Local Co-location Studies

Checking Precision and Accuracy of Triplicate Tubes

AEA Energy & Environment
From the AEA group

Diffusion Tubes Measurements

Period	Start Date dd/mm/yyyy	End Date dd/mm/yyyy	Tube 1 µgm^{-3}	Tube 2 µgm^{-3}	Tube 3 µgm^{-3}	Triplicate Mean	Standard Deviation	Coefficient of Variation (CV)	95% CI of mean
1	04/01/2013	01/02/2013	62.7	63.5	58.7	62	2.5	4	6.3
2	01/02/2013	01/03/2013	60.6	57.3	57.4	58	1.9	3	4.7
3	01/03/2013	26/03/2013	68.0	63.0	53.9	62	7.1	12	17.7
4	26/03/2013	24/04/2013	48.6	38.3	38.6	42	5.9	14	14.6
5	24/04/2013	30/05/2013	61.6	58.0	51.7	57	5.0	9	12.4
6	28/06/2013	30/07/2013	66.3	57.6	62.4	62	4.4	7	10.9
7	30/07/2013	03/09/2013	56.3	51.2	52.3	53	2.7	5	6.7
8	03/09/2013	04/10/2013	59.4	63.5	51.9	58	5.9	10	14.6
9	04/10/2013	01/11/2013	45.1	44.8	43.9	45	0.6	1	1.6
10	01/11/2013	06/12/2013	61.8	63.3	66.5	64	2.4	4	5.9
11	06/12/2013	08/01/2014	34.9	37.8	39.2	37	2.2	6	5.5
12									
13									

It is necessary to have results for at least two tubes in order to calculate the precision of the measurements

Automatic Method		Data Quality Check	
Period Mean	Data Capture (% DC)	Tubes Precision Check	Automatic Monitor Data
56.38	100.00	Good	Good
58.13	93.60	Good	Good
57.60	99.50	Good	Good
48.68	100.00	Good	Good
51.56	99.88	Good	Good
53.37	100.00	Good	Good
44.00	99.76	Good	Good
51.74	100.00	Good	Good
42.16	81.40	Good	Good
61.07	100.00	Good	Good
33.18	100.00	Good	Good
Overall survey -->		Good	Good

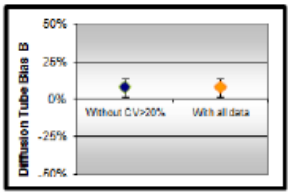
Site Name/ ID:	Lewisham New Cross Gate

Precision: 11 out of 11 periods have a CV smaller than 20%

(Check average CV & DC from Accuracy calculations)

Accuracy (with 95% confidence interval) without periods with CV larger than 20%	
Bias calculated using 11 periods of data	
Bias factor A	0.93 (0.88 - 0.99)
Bias B	8% (1% - 14%)
Diffusion Tubes Mean:	55 µgm^{-3}
Mean CV (Precision):	7
Automatic Mean:	51 µgm^{-3}
Data Capture for periods used:	98%
Adjusted Tubes Mean:	51 (48 - 54) µgm^{-3}

Accuracy (with 95% confidence interval) WITH ALL DATA	
Bias calculated using 11 periods of data	
Bias factor A	0.93 (0.88 - 0.99)
Bias B	8% (1% - 14%)
Diffusion Tubes Mean:	55 µgm^{-3}
Mean CV (Precision):	7
Automatic Mean:	51 µgm^{-3}
Data Capture for periods used:	98%
Adjusted Tubes Mean:	51 (48 - 54) µgm^{-3}



Jaume Targa, for AEA
Version 04 - February 2011

Discussion of Choice of Factor to Use

The choice of which bias factor to use is not straightforward; hence the two factors (local and default) are reported above to provide context . Box 3.3 of the TG 09 guidance provides some suggestions as to which factor might be most appropriate. In this instance, there are reasons for using either. However, as a precautionary approach is to be adopted, the results using the national factor have been utilised when comparing to the National Objectives.

PM Monitoring Adjustment

PM is measured at Lewisham 2 using a TEOM and at Lewisham 3 using a BAM. ERG King's College have developed a correction factor for PM data obtained using a TEOM known as the Volatile Correction Model and this has been applied to the data reported here from Lewisham 2. Details of the Volatile Correction Model are provided in TG (09).

QA/QC of Automatic Monitoring

Details of QA/QC

Site ID	Analyser/pollutant	Frequency and type of routine calibrations	Routine calibrations carried out by	Frequency of Site Audits	Site Audits carried out by
LW1	NO2, SO2, O3	2- weekly -manual	LA	Every 6 months	Contractors (ERG/NPL)
LW2	NO2, SO2	Overnight auto calibrations	LA	Every 6 months	Contractors (ERG/NPL)
LW3	N/A	N/A	N/A	Every 6 months	Contractors (ERG/NPL)
LW4	NO2	2- weekly- manual	LA	Every 6 months	Contractors (ERG/NPL)

The calibration of analysers are done with standard gases for each analyser (Except for PMs.). The calibration data are sent to ERG- King's College London who is responsible for Data Management and uses these for data validation and ratification purposes. The Site Audits includes UKAS accredited on site gas cylinder certification and on site testing of sampling system efficiency.
TEOM PM10 measurements are corrected using Volatile Correction Model (VCM) by ERG- King's.

Appendix B: Monthly Unbiased NO_2 Diffusion Tube Results (µg/m^3)

New Lewisham Code	Old Lewisham Code	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13		Unadjusted Average
L1	L1	49.6	45.5	38.6	27.4	28.2	28.4	36.6	32.7	45.5	38.5	50.8	41.3		**38.6**
L2	L2	38.6	33.5	35.2	21.6	26.2	23.0	26.4	26.3	19.5	30.3	45.2	29.7		**29.6**
L3	L3	44.8		37.4	25.3	33.5	28.8	36.5	33.5	44.8	33.2	52.2	38.2		**37.1**
L4	L4	51.7	43.3	33.3	24.6	30.0	26.9	33.2	33.5	40.2	41.1	48.8	40.7		**37.3**
L5	L5	52.0	52.0	49.3	35.5	37.4	44.6	50.4	35.9	48.6	34.2	49.3	30.0		**43.3**
L6	L6	49.8	37.3	36.9	28.7	34.8	33.2	35.5	38.3	38.8		49.8	38.2		**38.3**
L7	L7	49.7	52.9	51.1	38.1	45.7	45.9	65.8	56.8	63.8	53.7	63.5	58.8		**53.8**
L8	L8	56.1	52.9	57.6	48.9	39.1	46.1	52.2	43.9	50.7	41.3	51.9	42.3		**48.6**
L9	L9	47.1	51.1	48.9	35.1	40.3	47.3	31.5	28.5	37.2	27.7	52.3	38.9		**40.5**
L10	L10	57.0	54.6	55.3	46.3	38.0	39.6	42.8	35.8	50.0	39.7	52.6	42.8		**46.2**
L11	L11		104.7	47.3	37.2	34.4	38.5	48.4	34.6	49.8	36.6	56.1	33.4		**47.4**
L12	L12	60.6	42.2	40.7	25.5	23.7	21.2	24.2	27.3	36.3	32.7	48.3	35.8		**34.9**
L13	LWS 53	43.2	37.7	38.7	28.7	24.8	24.9	28.6	27.6	35.1	32.3	44.8			**33.3**
L14	LWS 002	44.2	39.9	42.5	23.9	26.3	25.9	26.7	31.0	36.1	34.6	48.6	37.0		**34.7**
L15	LWS 003	50.8	48.2	51.9	33.7	40.2	45.0	52.9	43.7	52.6	47.6	54.0	51.0		**47.6**
L16	LWS 004	58.1	59.5	66.9	47.8	52.9	62.4	73.8	57.1	67.2	45.1	67.6	44.5		**58.6**
L17	LWS 005 (T)	62.7	60.6	68.0	48.6	61.6	52.8	66.3	56.3	59.4	45.1	61.8	34.9	53.7***	**56.5**
L18	LWS 006 (T)	63.5	57.3	63.0	38.3	58.0	49.5	57.6	51.2	63.5	44.8	63.3	37.8		**54.0**
L19	LWS 007 (T)	58.7	57.4	53.9	38.6	51.7	29.7	62.4	52.3	51.9	43.9	66.5	39.2		**50.5**
L20	LWS 008	51.9	44.5	40.8	29.8	40.0	36.2	42.4	48.2	48.6	51.7	54.5	47.7		**44.7**
L21	LWS 009	64.5	49.5	42.9	33.9	50.1	46.8	55.2	59.9	57.9	59.4	70.8	57.3		**54.0**
L22	LWS 010	45.3	39.2	36.0	21.5	27.1	25.1	26.4	29.7		32.6	49.9	35.4		**33.5**
L23	LWS 011	70.4	58.6	66.6	56.8	48.7	54.5	70.0	56.8	62.8	54.6	60.2	58.6		**59.9**
L24	LWS 018	46.4	45.4	38.8	28.6	28.7	28.7	31.5	28.4	40.3	36.2	47.4	35.0		**36.3**
L25	LWS 014	36.4	34.2	35.3	18.2	20.1	18.5	24.9	22.4	29.9	25.9	37.3	26.9		**27.5**
L26	LWS 015	57.4	52.5	51.2	36.7	39.8	40.1	53.5	47.0	55.9	55.4	63.2	69.8		**51.9**
L27	LWS 016	51.0	41.1	41.6	25.0	29.9	32.1	36.8	32.5	40.7	35.8	48.4	31.0		**37.2**

L28	LWS 017	65.6	61.6	54.5	52.5	63.6	49.9	61.6	68.3	66.2	64.5	81.1	53.1	**61.9**
L29	SC H8	44.5	35.8	45.1	21.2	24.5	27.5	29.2	27.3	38.4	28.7	43.7	33.2	**33.3**
L30	SC H13	43.8	42.2	42.5	20.1	27.4	25.3	31.5	27.4	35.9	30.4	52.5	32.4	**34.3**
L31	SC H16	40.3	33.4		19.4	20.9	22.1	24.8		34.4		43.4	26.6	**29.5**
L32	SC H18	40.2	39.0	40.2	20.6	22.8	24.4	25.7	25.1	39.0	29.6	41.4	31.5	**31.6**
L33	SC H20	59.3		58.4	45.9	44.7	36.2	46.3	50.0	53.4	49.3	67.2	50.6	**51.0**
L34	SC H21		34.8	47.2	26.2	23.2		26.7	31.3	36.1	33.8	45.7	34.6	**34.0**

*** Average L17-L19 Triplicate tubes

Appendix C: List of Part B Processes within London Borough of Lewisham

Company/Name of Process	Address	Type of Process
Tesco Grove Park Service Station	340, Baring Road, SE12 0DU	PG1/14 – Petrol Station
Tesco Express	86, London Road, SE23	PG1/14 – Petrol Station
BP Petrol Station	411, Bromley Road, BR1 4PJ	PG1/14 – Petrol Station
BP Connect	Lee High Road, SE13 5PQ	PG1/14 – Petrol Station
Foxberry Service Station	242-246, Brockley Road, SE4 2SU	PG1/14 – Petrol Station
Tesco Express	290 Lewisham Road	PG1/14 – Petrol Station
Tesco Petrol Filling Station	97-99, Loampit Vale, SE13 7TG	PG1/14 – Petrol Station
Sainsburys Petrol Filling Station	263, New Cross Road	PG1/14 – Petrol Station
Sainsburys Sydenham	Bell Green, Southend Lane, SE26 4PU	PG1/14 – Petrol Station
Shell	351-367, Lewisham High street	PG1/14 – Petrol Station
Shell	163-165, Stanstead Road	PG1/14 – Petrol Station
Shell	101, Evelyn Street	PG1/14 – Petrol Station
Shell	96A, Bromley Hill	PG1/14 – Petrol Station
Petrocell Service Station	SE13 7PY	PG1/14 – Petrol Station
Sydenham Service Station	277, Kirkdale, SE26 4QD	PG1/14 – Petrol Station
Catford (Co-op. 109949-SPET) Filling Station	Brownhill Road, SE6 1AD	PG1/14 – Petrol Station
Shell	Verdant Ln/Whitefoot Ln, SE6 1TP	PG1/14 – Petrol Station
Lewisham Crematorium	Verdant Lane, SE6 1TP	PG5/2 – Crematoria
H Sivyer (Transport) Ltd	160 Sydenham Road, Sydenham, SE26 5JZ	PG3/16 – Mobile Crusher
H Sivyer (Transport) Ltd	160 Sydenham Road, Sydenham, SE26 5JZ	PG3/16 – Mobile Crusher
Gavigan Paving	Bolina Road Depot, SE16 3LD	PG3/1 – Blending, Packing, etc of Bulk Cement
2001 DC	141, Stanstead Road, SE23 1HH	PG6/46 – Dry Cleaners
Aplanda DC	50, Sydenham Road, SE26 5QF	PG6/46 – Dry Cleaners
Asik DC	250, Brockley Road, SE4 2SF	PG6/46 – Dry Cleaners
Bellingham Cleaners	30, Randlesdown Road, SE6 3BT	PG6/46 – Dry Cleaners

Blackheath DC	20, Blackheath Village, SE3 9SY	PG6/46 – Dry Cleaners
Brookbank DC	155, Brookbank Road, SE13 7DA	PG6/46 – Dry Cleaners
Brownhill DC	277, Brownhill Road, SE6 1AE	PG6/46 – Dry Cleaners
Busy Bees DC	146, Sydenham Road, SE26 5JZ	PG6/46 – Dry Cleaners
Carlton DC	6, Catford Broadway, SE6 4SP	PG6/46 – Dry Cleaners
Catford DC	24, Rushey Green, SE6 4JF	PG6/46 – Dry Cleaners
Classic Dry Cleaners (A&E Dry Cleaners)	1, Verdant Lane	PG6/46 – Dry Cleaners
Clean World DC	56, Baring Road, SE12 0PS	PG6/46 – Dry Cleaners
Cleaning Touch DC	173, Kirkdale, SE26 4QH	PG6/46 – Dry Cleaners
Deespy DC	118, Woodpecker Road, SE14 6EU	PG6/46 – Dry Cleaners
Downham Express DC	488, Bromley Road, BR1 4PP	PG6/46 – Dry Cleaners
Dry Clean Point	266 New Cross road	PG6/46 – Dry Cleaners
Finesse DC	250, Evelyn Street, SE8 5BZ	PG6/46 – Dry Cleaners
Five Star DC	6, Burnt Ash Road, SE12 8PZ	PG6/46 – Dry Cleaners
Forbs DC	19, Lewisham Way, SE14 6PP	PG6/46 – Dry Cleaners
H & A Dry Cleaners	380, Baring Road, SE12 0EF	PG6/46 – Dry Cleaners
Honor Oak Cleaners	42, Honor Oak Park, SE23 1DY	PG6/46 – Dry Cleaners
Hydra DC	51, Brockley Rise, SE23 1JG	PG6/46 – Dry Cleaners
Jubilee DC	6, Sandhurst Market, SE6 1DL	PG6/46 – Dry Cleaners
Kirkdale Express DC	155, Kirkdale, SE26 4QJ	PG6/46 – Dry Cleaners
Ladywell Junction Express Cleaners	75, Ladywell Road, SE13 7JA	PG6/46 – Dry Cleaners
Lewisham DC	13, Lee High Road, SE13 5LD	PG6/46 – Dry Cleaners
Lewisham Way DC	189, Lewisham Way, SE4 1UY	PG6/46 – Dry Cleaners
M&S DC	118, Deptford High Street, SE8 4NS	PG6/46 – Dry Cleaners
Manor Lane DC	176, Manor Lane, SE12 8LP	PG6/46 – Dry Cleaners
Master DC	22, Downham Way, BR1 5NX	PG6/46 – Dry Cleaners
Palace DC	9, Sydenham Road, SE26 5ET	PG6/46 – Dry Cleaners
Perry Cleaners	174, Perry Vale, SE23 2LR	PG6/46 – Dry Cleaners
HSBE Dry Cleaners	18, Bromley Hill, BR1 4JX	PG6/46 – Dry Cleaners
Quality - HSDC	77, Rushey Green, SE6 4AF	PG6/46 – Dry Cleaners
Speedway DC	191, New Cross Rod, SE14 5DG	PG6/46 – Dry Cleaners

Stanbridge Launderette	23 Burnt Ash Hill, ,	PG6/46 – Dry Cleaners
Starbright DC	86, Brownhill Road, SE6 2EW	PG6/46 – Dry Cleaners
Starlite DC	370, Brockley Road, SE4 2BY	PG6/46 – Dry Cleaners
Starshine DC	3, Georges Parade, Perry Hill, SE6 4DT	PG6/46 – Dry Cleaners
Streakers DC	3, Burntash Hill, SE12 0AA	PG6/46 – Dry Cleaners
Suits U Bespoke DC	35, Staplehurst Road, SE13 5ND	PG6/46 – Dry Cleaners
The Dry Cleaner	186, Hither Green Lane, SE13 6QB	PG6/46 – Dry Cleaners
Three Square Express DC	6, Dartmouth Road, SE23 3XU	PG6/46 – Dry Cleaners
Top Class	80 Brockley Rise	PG6/46 – Dry Cleaners
Trend DC	239, Bromley Road, SE6 2RA	PG6/46 – Dry Cleaners
Turbo DC	17, Brockley Rise, SE23 1JG	PG6/46 – Dry Cleaners
Whistle & Flute DC	144, New Cross Road, SE14 5BA	PG6/46 – Dry Cleaners
Whitehouse DC	166, Hither Green Lane, SE13 6QA	PG6/46 – Dry Cleaners